

TECHNICAL DOCUMENT 3118 January 2001

## Accomplishment Report for Fiscal Year 2000

SSC San Diego C<sup>4</sup>I Programs Office Philadelphia

Approved for public release; distribution is unlimited.

SSC San Diego

20010406 191

#### TECHNICAL DOCUMENT 3118 January 2001

## Accomplishment Report for Fiscal Year 2000

SSC San Diego C<sup>4</sup>I Programs Office Philadelphia

Approved for public release; distribution is unlimited.





SSC San Diego San Diego, CA 92152-5001

#### SSC SAN DIEGO San Diego, California 92152–5001

E. L. Valdes, CAPT, USN Commanding Officer

R. C. Kolb Executive Director

#### **ADMINISTRATIVE INFORMATION**

The work described in this report was performed for the Naval Air Systems Command, the Naval Sea Systems Command, and the National Imagery & Mapping Agency by the SSC San Diego C<sup>4</sup>I Programs Office Philadelphia.

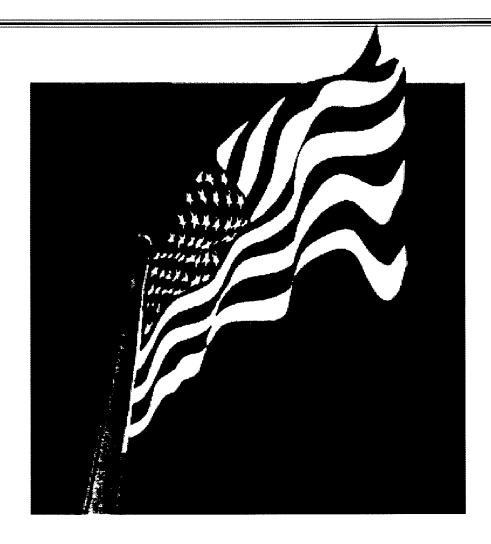
Released under authroity of F. R. Wahler Director of C<sup>4</sup>I Systems, Philadelphia

#### **TABLE OF CONTENTS**

Introduction	1
SSC San Diego C <sup>4</sup> I Programs Office Philadelphia Location and Facilities	2
Organizational Chart	
Principles of Operation	4
Visits	5
Awards and Recognition	6
Bring Our Children to Work Day	17
Management Support	18
Administration and Acquisition Support	19
Funding by Agency	20
Funding by Appropriation	21
Funding by Navy Claimant	22
Contracting	23
Technical Accomplishments	24
Strike Interface Test Facility	25
Cruise Missile Command & Control System Support Office Afloat Planning System (APS)	26
Joint Service Imagery Processing System – Navy (JSIPS-N)	
Naval Strike Warfare Planning Center (NSWPC)	
TOMAHAWK Mission Planning Shore Site Support (TPS)	31
Logistics Planning Support to PMA-281	33
Washington Planning Center (WPC)	35
Naval Mission Planning Systems Support Office	
Naval Mission Planning Systems (NavMPS)	36
Imagery Support Office	
Digital Camera Receiving Station (DCRS)	43
Digital Photo Lab AN/UYQ-78(V) (DPL)	45
Fleet Photo Support	47
Analytical Photogrammetric Positioning System (APPS)	48

### **TABLE OF CONTENTS continued**

Nati	ional Imagery & Mapping Agency Support Office	
	Image Product Library (IPL)	49
Glo	ossary of Acronyms	53
Lis	t of Figures	
1.	Philadelphia Area	2
2.	Naval Support Activity Philadelphia Buildings	2
3.	Organizational Chart for SSC San Diego C <sup>4</sup> I Programs Office Philadelphia	
4.	Principles of Operation for SSC San Diego C <sup>4</sup> I Programs Office Philadelphia .	
5.	Funding by Agency	20
6.	Funding by Appropriation	21
7.	Funding by Navy Claimant	22
Lis	t of Tables	
1	Administrative Workload	19



CUSTOMER

SATISFACTION

is Our Only

Product.



#### INTRODUCTION

Space and Naval Warfare Systems Center (SSC) San Diego C<sup>4</sup>I Programs Office Philadelphia, formerly designated the SPAWARSYSCEN San Diego Detachment Philadelphia, was established in November 1998 as an integral unit of SSC San Diego Command and Intelligence Systems Division (Code D42). For a map of the location, see Figure 1, Philadelphia Area, and see Figure 2, Naval Support Activity (NSA) Philadelphia Buildings, for a diagram of the facilities.

SSC San Diego C<sup>4</sup>I Programs Office Philadelphia is responsible for a program of development, inservice engineering, procurement, installation support, configuration control and integrated logistics support for mission planning systems, electronic photographic processing systems, and imagery archiving systems afloat and ashore worldwide. During fiscal year 2000 (FY00), SSC San Diego C<sup>4</sup>I Programs Office Philadelphia provided technical support to:

- ◆ Commander, Naval Air Systems Command
  - ❖ Program Executive Officer, Strike Weapons and Unmanned Aviation (PEO(W))
    - ♦ Command and Control Systems Program Office (PMA-281)
  - ❖ Program Executive Officer, Tactical Aircraft Programs Office (PEO-T)
    - ♦ Tactical Aircraft Mission Planning System Program Office (PMA-233)
    - ♦ F-14 Program Office (PMA-241)
- ◆ Naval Electronic Logistics Office (NELO)
- Commander, Naval Sea Systems Command
  - ❖ Aircraft Carrier Program Office (PMS-312)
  - ❖ Amphibious Warfare Program Office (PMS-377)
- ◆ National Imagery and Mapping Agency (NIMA)
- ◆ Joint, service, and allied commands and program offices.

Directed by a civilian manager, SSC San Diego C<sup>4</sup>I Programs Office Philadelphia has a staff of sixty-five civil service employees with various disciplines and skills, including multi-disciplinary engineers, computer specialists, electronics and engineering technicians, logisticians, and management support personnel. Customer satisfaction based upon Total Quality Management (TQM) and the Quality Process is SSC San Diego C<sup>4</sup>I Programs Office Philadelphia's principal goal and criterion of achievement. SSC San Diego C<sup>4</sup>I Programs Office Philadelphia's efforts are supplemented by one hundred and seventy-four contractor engineering and technical support personnel.

SSC San Diego C<sup>4</sup>I Programs Office Philadelphia's internal structure is depicted in its Organizational Chart, Figure 3. Principles of Operation, Figure 4, graphically illustrates SSC San Diego C<sup>4</sup>I Programs Office Philadelphia's commitment to customer satisfaction.

## SSC SAN DIEGO C<sup>4</sup>I PROGRAMS OFFICE PHILADELPHIA LOCATION AND FACILITIES

#### Location:

SSC San Diego C<sup>4</sup>I Programs Office Philadelphia is located in Buildings 2 and 7, Naval Support Activity (NSA) Philadelphia compound, 700 Robbins Avenue, Philadelphia, Pennsylvania. NSA Philadelphia is easily accessible by public transportation and to several major highways, which include the Pennsylvania and New Jersey turnpikes, Interstate 95, and US Route 1. The Philadelphia International Airport is less than thirty minutes south on I-95. Rail service is available through either the Philadelphia or Trenton, New Jersey stations.

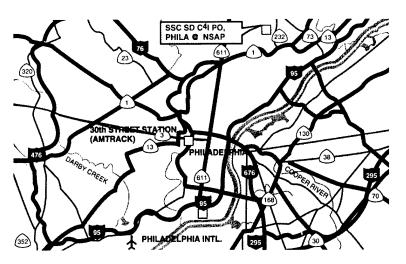


Figure 1. Philadelphia Area

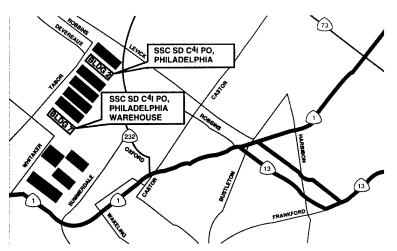


Figure 2. Naval Support Activity Philadelphia Buildings

#### **Facilities:**

In FY00, SSC San Diego C<sup>4</sup>I Programs Office Philadelphia consisted of administrative, laboratory, and warehouse facilities. In Building 2, SSC San Diego C<sup>4</sup>I Programs Office Philadelphia occupies 39,443 square feet of administrative and fleet support laboratory space. The fleet support laboratory contains the Strike Interface Test Facility (SITF), a complex of fleet-configured and supported tactical mission planning and imagery support systems; project technical analysis and consolidated help desks; a systems

support training area and an integration area. The laboratory also provides Secure Internet Protocol Router Network (SIPRNET) and Joint Worldwide Intelligence Communications System (JWICS) access and contains three fully accredited security areas consisting of a Sensitive Compartmented Information Facility (SCIF) and two Special Access Program (SAP) rooms. Building 2 also houses the administrative, engineering, and technical support areas.

# SSC San Diego C4l Programs Office Philadelphia



Deputy: Barbara Wiley Bruce Heath Mary Ann Grookett Peggy Marlett



Francis D. Donaghy

Head, Administrative Support Office

> Rhea Feldman Wayne Lombardo Eileen Nikander

Fred Wahler Manager



Betty Kriegel Adminstrative Assistant



Dennis Rozanski Head Cruise Missile Command & Control Systems Support Office

Deputy: Bill Nork **Dennis Alexander** Jim Barnes Kenneth Chung Mark Cunningham Frank Davies Joe Di Pardo Jim Engelke Allan Gaidis Steve Hoshowsky John Kitano Jim Kitts Dean Kralle Stephen Kubicki **Ted Morrison** Bohdan Sobkiw Jim Steib Ed Zantek



Steve Fox Head Naval Mission Planning Systems Support Office

Deputy: Karen Levine Timothy Boyce Fran Brown Edward Dolecki Craig Doster J.C. Fitzgerald **Bob Grant** Judy Jolly Dennis Klinger Christopher LaBohne Paul Meisinger **Beth Ann Miles** Nhan Nguyen Kevin O'Malley Dave Salmon John Sheplock Michael Slough Paul Steinbacher **Chuck Storicks** Mary Williams



Tim Urbanski Head Imagery Support Office

Deputy: Dennis Lloyd Anthony Brancato Eddie Smith Charles Soule



Vivian Di Cristofaro Head National Imagery & Mapping Agency Support Office

Deputy: Frank Greco Joel Cohen Lou Di Girolamo Peter Di Pasquale Mike Finlay Robert Flipse Robert Mullen Robert Overholt Norbert Reis

Figure 3.
Organizational Chart

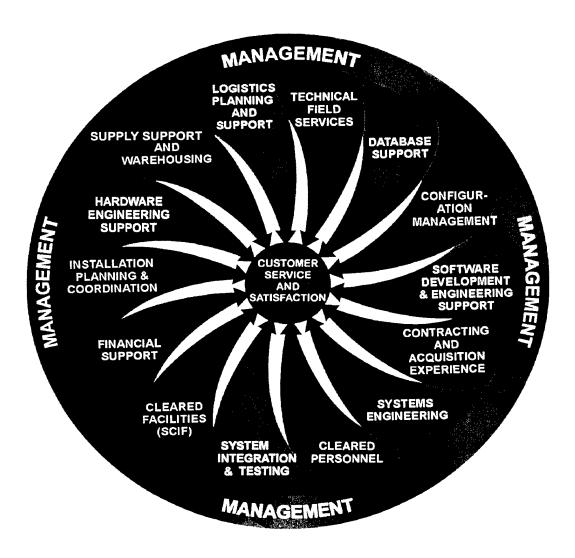


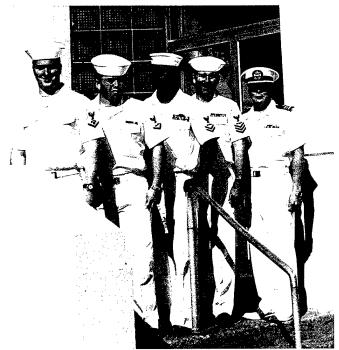
Figure 4. Principles of Operation for SSC San Diego C<sup>4</sup>I Programs Office Philadelphia

#### **VISITS**

The Naval Reserve Air System Command provided reservists from NRNASC 0109 Saint Louis, Missouri, Unit 15 for warehouse support to the NavMPS Support Office.

The reservists are from left to right: AS2 Mallet, AK2 O'Conner, AE3 Harris, and LCDR West.





The Naval Reserve Air System Command provided Reservists from NRNASC 0109 Saint Louis, Missouri, for warehouse and office support to the NavMPS Support Office.

The reservists are from left to right: IC3 Joel Kaffenberger, AT3 Doug Neumaber, AME2 Paul Dixon, AK1 Jeff Gates, and LCDR David Farley.

Reservists working in the warehouse are as follows, from left to right:
AME2 Paul Dixon,
IC3 Joel Kaffenberger,
AT3 Doug Neumaber,
and AK1 Jeff Gates.





Vivian Di Cristofaro receives her Navy Meritorious Civilian Service Award from Dr. R. Jaffee, Head, Command & Intelligence Systems Division, and Fred Wahler, Manager, SSC San Diego C<sup>4</sup>I Programs Office.



Steve Fox receives his Navy Meritorious Civilian Service Award from Oreta Stinson, PMA-233, as Captain Maslowsky, U.S.N., OPNAV 062, Jim Cleer, PMA-233, and Fred Wahler observe.



Vivian Di Cristofaro receives a Certificate of Special Congressional Recognition for earning the Navy Meritorious Civilian Service Award and her Navy Meritorious Civilian Service Medal from Fred Wahler.



Barbara Wiley is congratulated on receiving her Exemplary Achievement Award for superior support to the Project Support Offices within the SSC San Diego C<sup>4</sup>I Programs Office Philadelphia by Fred Wahler.



Fred Wahler presents the SSC San Diego Command and Control Department Code D40 Distinguished Acheivement in Business Development Award to Vivian Di Cristofaro.



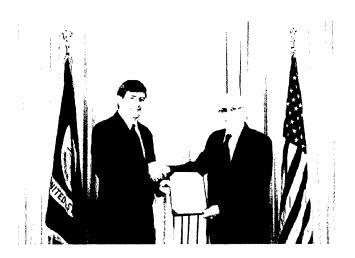
Fred Wahler presents the SSC San Diego Command and Control Department Code D40 Distinguished Acheivement in Project Accomplishment Award to Robert Mullen as Vivian Di Cristofaro observes.



The NIMA Support Office received the SSC San Diego Command and Control Department Distinguished Achievement Team Award. Team members from left to right are Eileen Nikander, Bob Flipse, Lou Di Girolamo, Robert Overholt, Robert Mullen, Mike Finlay, Norbert Reis, Pete Di Pasquale, Frank Greco, and Joel Cohen. Not shown is Vivian DiCristofaro, Head.



Fleet and Industrial Supply Center (FISC) Team members, Randy Aldridge, Christine McKinney, Deborah Beale, and David Henry, receive a Letter of Appreciation from Captain Moebius, PMA-233, Commander Downs, FISC Officer-in-Charge, and Oreta Stinson.



Fred Wahler presents a Letter of Appreciation to J. C. Fitzgerald from Captain Pritulsky, U.S.N., for outstanding support and training to the French E-2C TAMPS Program.



Fred Wahler presents a Letter of Appreciation to Mary Williams, Nhan Nguyen, and Karen Levine from Rear Admiral J. A. Cook, U.S.N., and Lieutenant General L. F. Keene, USAF, for outstanding teamwork and superb accomplishments as Steve Fox observes.



NavMPS Support Office Team members from left to right are Karen Levine, Deputy, Paul Steinbacher, John Sheplock, Dave Salmon, Fran Brown, Barb Wiley, Chuck Storicks, Beth Ann Miles, Christopher LaBohne, Rhea Feldman, Steve Fox, Head, and Paul Meisinger. Captain Moebius and Jim Cleer, PMA-233, observe as Oreta Stinson presents a Letter of Appreciation to the Y2K Team for outstanding performance and professionalism in service to NavMPS. Not shown is Judy Jolly.



NavMPS Support Office Team members from left to right are Karen Levine, Deputy, Edward Dolecki, J. C. Fitzgerald, Nhan Nguyen, Timothy Boyce, Michael Slough, Bob Grant, Steve Fox, Head, and Craig Doster. Captain Moebius and Jim Cleer observe as Oreta Stinson presents a Letter of Appreciation to the Y2K Team for outstanding performance and professionalism in service to NavMPS.



#### Career Service Awards

Paul Steinbacher receives his 35 year Career Service Award from Fred Wahler.

Francis D. Donaghy receives his 30 year Career Service Award from Captain Ernest L. Valdes, U. S. N., Commanding Officer, SSC San Diego, and Dr. R. C. Kolb, Executive Director, SSC San Diego.





Rhea Feldman receives her 30 year Career Service Award from Captain Ernest L. Valdes, U. S. N., Commanding Officer, and Dr. R. C. Kolb.

#### Career Service Awards

Vivian Di Cristofaro receives her 25 year Career Service Award from Fred Wahler as Dr. R. Jaffee observes.





Pete Di Pasquale receives his 25 year Career Service Award from Fred Wahler as Dr. R. Jaffee observes.

Anthony Brancato receives his 25 year Career Service Award from Fred Wahler.



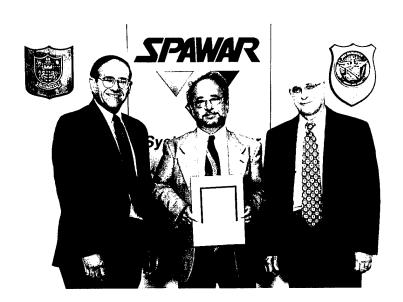


#### Career Service Awards

Judy Jolly receives her 25 year Career Service Award from Fred Wahler.

Ted Morrison receives his 25 year Career Service Award from Fred Wahler.

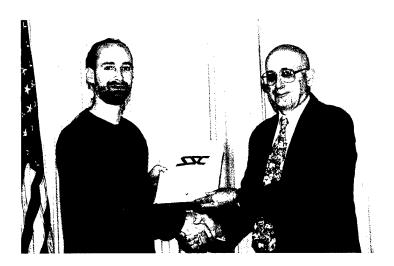




Wayne Lombardo receives his 20 year Career Service Award from Fred Wahler as Dr. R. Jaffee observes.

#### Career Service Awards

Charles Soule receives his 20 year Career Service Award from Fred Wahler.

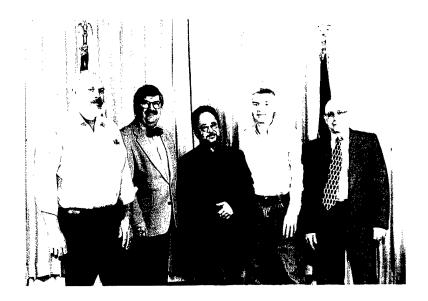




Michael Slough receives his 10 year Career Service Award from Fred Wahler as Dr. R. Jaffee observes.

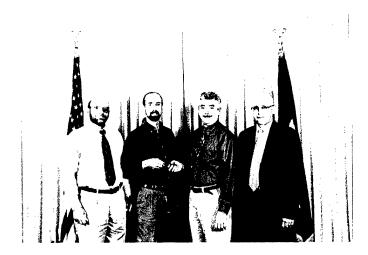
Fred Wahler and Steve Fox congratulate Karen Levine on receiving her diploma from Cabrini College. She graduated magna cum laude with a Bachelor of Arts degree in Organizational Management.





Y2K Team members, Bob Flipse, Francis D. Donaghy, Wayne Lombardo, and James Barnes receive their Bravo Zulu Service Awards from Fred Wahler.

Dennis Lloyd and Charles Soule receive their Bravo Zulu Service Awards from Fred Wahler as Tim Urbanski observes.





Joel Cohen receives his Bravo Zulu Service Award from Fred Wahler and Vivian DiCristofaro.

#### BRING OUR CHILDREN TO WORK DAY

On April 27, 2000, the Naval Support Activity, Philadelphia hosted "Bring Our Children to Work Day." Ranging in age from nine through fourteen, twenty-five children accompanied their parents or guardians to experience the realities of the work world and gain insight on how various careers contribute to the workforce. The children sat with their parents at the parent's workstation to observe daily job activities.



#### From left to right:

David Heath, Meagan Kalberer, Timothy Kriegel, Maria Cohen, Karen Wiley, Laura Nikander, Kimberly Cohen, Nicole Giberson, Jennifer Harris, Katie Cohen, Courtney Greco, Sara Egan, Allison Traenkner, Patrick Giberson, Raymond Costello, Meagan Sambuca, Zachary Feldman, Keith Wagner, Kenny Rodgers, Pamela Cristalli, Kelsey Shields, Joey Cristalli, Shannon Barnes, Brittany Shields, and

Samantha Wagner.

SSC SD C<sup>4</sup>I Programs Office Philadelphia manager, Fred Wahler distributes prizes for the teams who completed the C<sup>4</sup>I Programs Office information scavenger hunt.



#### **ADMINISTRATIVE SUPPORT OFFICE**



Francis D. Donaghy, Head, Administrative Support Office



Bruce Heath, Security Officer



Mary Ann Grookett, Security Assistant



Eileen Nikander, Acquisition Specialist



Barbara Wiley, Deputy and Program Analyst



Wayne Lombardo, Facilities and Safety



Rhea Feldman, Acquisition Specialist



Peggy Marlett, Program Assistant

#### ADMINISTRATIVE AND ACQUISITION SUPPORT

SSC San Diego C<sup>4</sup>I Programs Office Philadelphia's Total Obligating Authority (TOA) was \$61.9 million in FY00. Nearly three-quarters of these funds were from Navy sources, whereas, DoD and other joint services' funds comprised the remainder. Acquisition of materials and services totaled \$57.1 million. The total number of purchase requisitions increased by ten percent. Credit card transactions were level. However, the total value of purchases under the program increased, partly as a response to an expanded purchasing authority limit granted to two experienced members of the support staff acquisition team.

Travel and outgoing message traffic in response to client support requirements or inquiries remained at a high level as supported systems increased. Y2K planning and execution was accomplished with no disruption to ongoing support efforts. SSC San Diego C<sup>4</sup>I Programs Office Philadelphia received reaccreditation for its technical support computer systems, SIPRNET access and connection, and laboratory open-storage.

Warehouse operations were improved with the installation of enhanced lighting and data/voice communications systems, acquisition of additional materials handling and occupational safety equipment, and construction of security cages for the storage of high value materials. Receiving and shipping facilities were reconfigured and improved. FedEx bills of lading were up slightly from the previous year. SSC San Diego C<sup>4</sup>I Programs Office Philadelphia processed 2,145 shipping documents (DD1149).

SSC San Diego C<sup>4</sup>I Programs Office Philadelphia's administrative workload is catalogued in the table below.

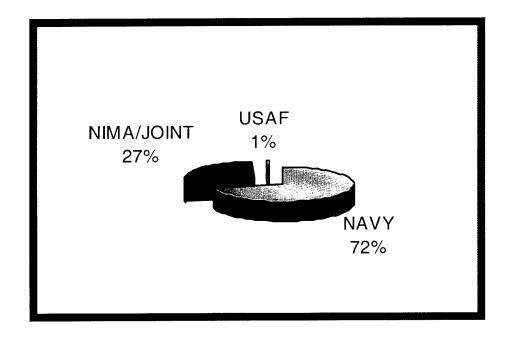
432 Purchase requisitions 3376 Requisition stubs Credit Card transactions 1441 **MILSTRIPS** 134 2399 FedEx bills of lading (non-DLA) Prompt payment invoice certifications 652 Number of items on invoices certified 2396 944 Travel orders Correspondence 75 Training documents 120 Naval Messages 759 Shipping documents (DD1149) 2145 Classified documents and other media 2093 Held 195 554 Destroyed • Transmitted 1344

Table 1. Administrative Workload FY00

# SSC SAN DIEGO C4I PROGRAMS OFFICE PHILADELPHIA

#### FY00 FUNDING BY AGENCY

TOTAL: \$61,980,700



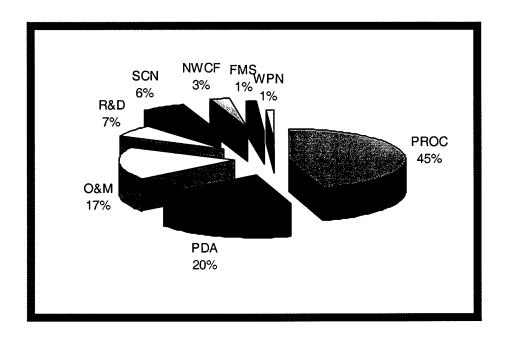
■NAVY \$ 44748.2 ■NIMA/JOINT \$ 16789.0 □USAF \$ 443.5

Figure 5. Funding By Agency

#### SSC SAN DIEGO C<sup>4</sup>I PROGRAMS OFFICE PHILADELPHIA

## FY00 FUNDING BY APPROPRIATION

TOTAL: \$61,980,700



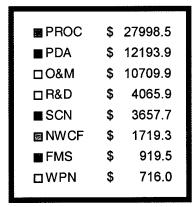
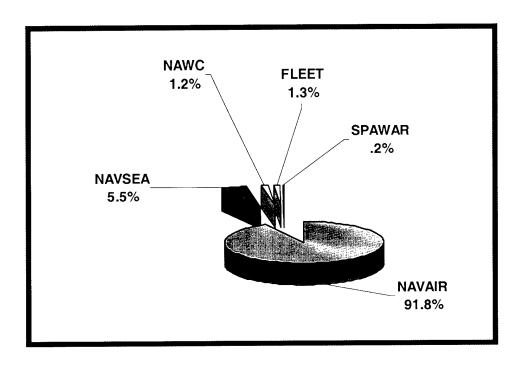


Figure 6. Funding By Appropriation

#### SSC SAN DIEGO C<sup>4</sup>I PROGRAMS OFFICE PHILADELPHIA

#### FY00 FUNDING BY NAVY CLAIMANT

TOTAL: \$44,748,200



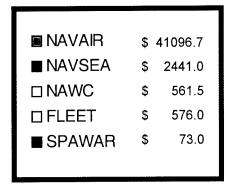


Figure 7. Funding By Navy Claimant

#### CONTRACTING

SSC San Diego C<sup>4</sup>I Programs Office Philadelphia's Total Obligating Authority (TOA) was \$61.9 million. Of the total, over \$57.1 million was used in the acquisition of goods and services in support of assigned projects. The primary contracting agency utilized for procurement was the Fleet and Industrial Supply Center (FISC), Norfolk Detachment Philadelphia. By dollar volume, over 62 percent of FISC actions were awarded under the competitive bidding process. Significant activity employing MILSTRIP contracting was also conducted with the Defense Industrial Support Center, Philadelphia, in support of the Digital Photo Lab (DPL) project.

Government credit card usage accounted for over 1,440 transactions in FY00. The implementation of electronic reconciliation of monthly statements was accomplished smoothly and without negative impact.

SSC San Diego C<sup>4</sup>I Programs Office Philadelphia personnel provided trained and experienced administrative and technical assistance as Contracting Officer's Representatives (COR) for five major multi-year engineering and technical contracts supporting ongoing projects. A new multi-year services contract for imagery support was awarded in FY00. Options on the other four contracts were exercised during the fiscal year.

The current CORs supporting these contracts are:



Rhea Feldman, Technical and Facility Support Services



Lou Di Girolamo, Engineering and Technical Services



Dean Kralle, Engineering and Repair Services

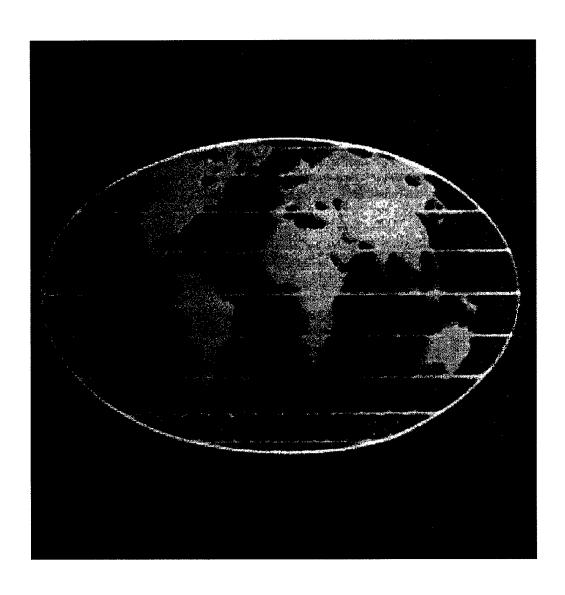


Eileen Nikander, Engineering, Fabrication, and Installation Services



Anthony Brancato, Imagery Support Services

# TECHNICAL ACCOMPLISHMENTS 2000



#### STRIKE INTERFACE TEST FACILITY



SSC San Diego visitors (front row) Miriam Glorioso, Fred Kramer, Dr. R. Jaffee, Dr. S. B. Schneiderman, and Sue Patterson tour the Strike Interface Test Facility. F. Escobar and K. O'Malley (back row) observe.

SSC San Diego C<sup>4</sup>I Programs Office Philadelphia established a Strike Interface Test Facility (SITF) in FY99. This facility was designed to combine all the primary systems that are used by the mission planners aboard aircraft carriers. These systems include the Imagery Product Library (IPL), the Precision Targeting Workstation (PTW), the Digital Camera Receiving Station (DCRS), the Tomahawk Land Attack Missile (TLAM) Afloat Planning System (APS), the Launch Platform Mission Planning (LPMP) System, the Global Command and Control System–Maritime (GCCS-M), the Tactical Automated Mission Planning System (TAMPS), and the Navy Portable Flight Planning Software (N-PFPS).

This unique configuration is one of the first shore-based facilities with all currently fielded equipment operating in an Integrated Shipboard Network Systems (ISNS) certified networked environment. The equipment and network connections of the lab can be readily modified to match any current or projected shipboard configuration. The Strike Interface Test Facility lab is staffed and maintained by experts in the development, installation, support, and operation of each system. In FY00, SSC San Diego C<sup>4</sup>I Programs Office Philadelphia fully exercised our capabilities by providing operational procedure development, testing, training, and fleet support services for both deployed military units and developmental systems.



F. Greco demonstrates IPL as F. Escobar, Miriam Glorioso, Fred Kramer, and Dr. R. Jaffee, observe.



K. O'Malley explains the configuration of the SITF as Dr. R. Jaffee, T. Boyce, Dr. S. B. Schneiderman, and C. A. Norton observe.

## **ENGINEERING & TECHNICAL SUPPORT TO PMA-281 FOR AFLOAT PLANNING SYSTEM (APS)**

#### Role:

- → Technical Services
- → Installation Planning
- → Testing Support
- → Integrated Logistics Support



The Afloat Planning System (APS) is comprised of the computer system and applications software items, which provide for the planning, distribution, and employment support of the Tomahawk Land Attack Missile (TLAM). APS will provide each Battle Force/Battle Group (BF/BG) Commander with the same functional capability as the shore-based Cruise Missile Support Activity (CMSA) for planning conventional TLAM missions. The APS can facilitate a reduction in the dependence on non-organic assets or long-haul communications for management information system data during crisis surge and/or hostile activity.



Dennis Rozanski, Head, Cruise Missile Command & Control Systems Support Office



Bill Nork, Deputy, Cruise Missile Command & Control Systems Support Office

SSC San Diego C<sup>4</sup>I Programs Office Philadelphia's APS efforts for FY00 included coordinating and participating in the installation of hardware and/or software and testing of the APS on the platforms listed below. We architected, procured, assembled, and integration tested all TAC-4 hardware installed on the following platforms:

USS Enterprise (CVN 65) USS Carl Vinson (CVN 70) USS Theodore Roosevelt (CVN 71) USS Abraham Lincoln (CVN 72) USS Harry S. Truman (CVN 75).

SSC San Diego C<sup>4</sup>I Programs Office Philadelphia also installed a Launch Platform Mission Planning (LPMP) System at Commander, U. S. Fifth Fleet (COMFIFTHFLT). As part of the Fleet Battlelab Experiments Golf (FBE-G), we architected, procured, assembled, and integration tested and installed LPMP Systems onboard the *USS Anzio* (CG 68) and the *USS Cape St George* (CG 71).

#### **Point of Contact:**

**Mr. Allan M. Gaidis**, Code D4232 Tel: (215) 214-8033; DSN 442-8033

FAX (215)-214-8109

Email: gaidis@spawar.navy.mil

SSC San Diego C4I Programs Office Philadelphia



Allan Gaidis, Installation Support



Jim Steib, Installation Support



Steve Hoshowsky, Engineering Support

# FOR JOINT SERVICE IMAGERY PROCESSING SYSTEM - NAVY (JSIPS-N)

#### Role:

- **Engineering/TechnicalServices**
- > Installation Planning
- → Testing Support
- → Integrated Logistics Support



The Joint Service Imagery Processing System – Navy (JSIPS-N) is a digital imagery processing and management system. JSIPS-N provides the capability to receive, process, exploit, store, and disseminate imagery, imagery derived products, and imagery intelligence based on multi-source imagery from national and tactical sensors. The primary mission of JSIPS-N is to assist Strike Planners, Tactical Aviators, and Marine Corps Amphibious Planners in the delivery of precision ordnance on target. The secondary missions of the system are (1) to provide near real-time imagery and support to fleet intelligence assets and Special Operations Forces, and (2) to support primary exploitation and dissemination of tactical imagery intelligence products.

SSC San Diego C<sup>4</sup>I Programs Office Philadelphia's effort for FY00 included coordinating the installation of hardware, software, and testing of the JSIPS-N system onboard the following platforms:

USS Carl Vinson (CVN 70)

USS Enterprise (CVN 65)

USS Harry S. Truman (CVN 75)

USS Kitty Hawk (CV 63)

USS Abraham Lincoln (CVN 72)

USS Constellation (CV 64)

USS Blue Ridge (LCC 19)

USS Mount Whitney (LCC 20)

USS La Salle (AGF 3) USS Coronado (AGF 11)

NSAWC Fallon

NMITC

**CMSALANT** 

**CMSAPAC** 

WPC

USS Wasp (LHD 1)

USS Essex (LHD 2)

USS Kearsarge (LHD 3)

USS Boxer (LHD 4)

USS Bataan (LHD 5)

USS Bonhomme Richard (LHD 6)

USS Tarawa (LHA 1)

USS Saipan (LHA 2)

USS Nassau (LHA 4)

USS Peleliu (LHA 5)

SSC San Diego C<sup>4</sup>I Programs Office Philadelphia participated in the selection, procurement, integration, evaluation and installation of Precision Targeting Workstation (PTW) 4.0 hardware at afloat and shore sites. In addition, we participated in the following JSIPS-N development efforts:

- Tactical Input Segment (TIS)
- Transit Case Tactical Input Segment (TTIS)
- JSIPS-N Concentrator Architecture (JCA)
- PTW 4.0
- Printer Studies
- JSIPS-N/GCCS-M (ISNS) LAN Investigations
- RAID Studies
- Display Studies

To ensure JSIPS-N compliance with NAVSEA installation requirements, SSC San Diego C<sup>4</sup>I Programs Office Philadelphia maintained an interface with Naval Sea Systems Command (NAVSEA). We developed JSIPS-N Ship Alteration (SHIPALT) Records for multiple ship classes utilizing an incremental installation approach. SSC San Diego C<sup>4</sup>I Programs Office Philadelphia utilized the NAVSEA scheduling

process to accomplish installations during CNO

availabilities.

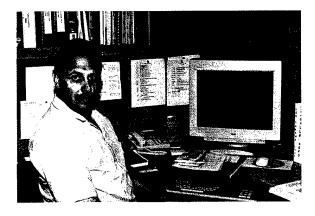
#### **Point of Contact:**

**Mr. Mark Cunningham**, Code D4232 Tel: (215) 214-8035, DSN: 442-8035

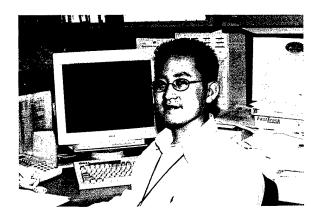
FAX (215) 214-8109

Email: markc@spawar.navy.mil

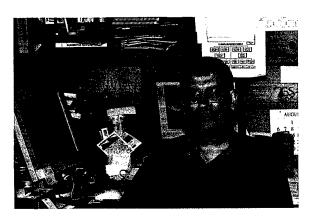
SSC San Diego C4I Programs Office Philadelphia



Mark Cunningham, Engineering Support



Kenneth Chung, Engineering Support



Ed Zantek, Installation Support

#### **NAVAL STRIKE WARFARE PLANNING CENTER (NSWPC)**

#### Role:

- → Compilation and Analysis of System Data
- → Space Utilization and Design
- → Installation Planning Support

SSC San Diego C<sup>4</sup>I Programs Office Philadelphia produces and updates installation guides for all the systems under its cognizance. The installation guides contain the system's Installation Control Drawings (ICD) and the parametric data necessary to prepare the Ships Installation Drawings (SID), which are required to install equipment onboard a ship. The information from these installation guides and the collected data from other systems located in the Aircraft Carrier Intelligence Center (CVIC) are used to plan for the orderly addition of new equipment and the updating of existing systems.

During FY00, SSC San Diego C<sup>4</sup>I Programs Office Philadelphia continued to support this effort by providing technical assistance, participating in design reviews and other technical meetings, and serving as liaison with several Program Offices in all of the Systems Commands.

SSC San Diego C<sup>4</sup>I Programs Office Philadelphia provides planning support to PMA-281 and the Design Center for the *USS Nimitz* (CVN 68) and the *USS Ronald Reagan* (CVN 76). With many new systems coming aboard, our personnel are working in conjunction with the Commander, Naval Air Force, Atlantic Fleet (COMNAVAIRLANT) and the Washington Planning Center (WPC) to develop a more functional CVIC.

SSC San Diego C<sup>4</sup>I Programs Office Philadelphia developed and configured the Prototype Integration Facility (PIF) for the Naval Strike Warfare Planning Center (NSWPC) in Washington, D. C. Operated by PMA-281, the PIF is used for both systems engineering and ship's force familiarization with CVIC equipment. The PIF allows these functions to be completed prior to installation onboard an aircraft carrier that is either being built or undergoing a complex overhaul at Newport News Shipbuilding.

SSC San Diego C<sup>4</sup>I Programs Office Philadelphia's team designed and installed the electrical power distribution for electronic equipment in the PIF, which was completed in May 2000. The team provides

procurement support and installation support associated with the electronic systems installations. A reduced package of *USS Nimitz* (CVN 68) equipment has been cycled through the PIF. A full complement of *USS Ronald Reagan* (CVN 76) equipment is being planned.

#### **Point of Contact:**

**Mr. Allan M. Gaidis**; Code D4232 Tel: (215)-214-8033; DSN 442-8033

FAX (215) 214-8109

Email: gaidis@spawar.navy.mil

SSC San Diego C4I Programs Office Philadelphia

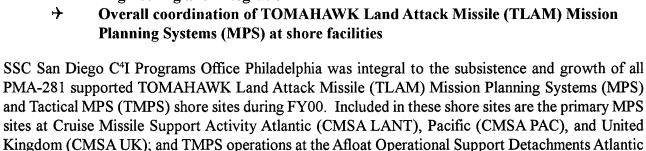


Jim Engelke, Installation Support

# TOMAHAWK MISSION PLANNING SHORE SITE SUPPORT

#### Role:

- Installation Planning, Implementation and Suite Light-Off and Checkout
- → Direct On-Site Support and Upgrade Implementation
- → Configuration and Uniformity Management
- → Integrated Logistics Support
- → Physical and Automated Information System (AIS)
   Accreditation Assistance
- → Coordination and Security Guidance and Assistance
- → Coordination of Rapid Deployment Suite (RDS) Plant Engineering and Integration

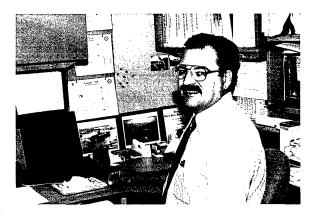


(AOSD LANT) and Pacific (AOSD PAC), Naval Strike and Air Warfare Center (NSAWC), and

Tasking from PMA-281 encompasses support of the Theater Mission Planning Center (TMPC), Joint Service Imagery Processing System-Navy (JSIPS-N), and Afloat Planing System (APS) hardware and systems, often requiring direct involvement with facility modifications and upkeep. Although the sites are generally either configured as TMPC or tactical APS/JSIPS-N suites, no two suites are identical. Installation practice normally includes alterations to site facilities, as well as systems.

The TMPS suites located at AOSD LANT, AOSD PAC, and NSAWC are unique in that each was incorporated into a set of four mobile shelters capable of deployment to any land or shipboard platform within a short timeframe. These suites have played a primary role in the training arena; however, they have each been used to support local operations during periods when one of the respective CMSA sites was inoperable due to maintenance or the installation of upgrade enhancements. Since the need for deployment has been reduced by maximized shipboard installations, a major effort to relocate these suites into permanent quarters

Commander, U.S. Fifth Fleet (COMFIFTHFLT).



Stephen Kubicki Jr., Installation Support

was undertaken during FY00. Overseeing the construction, accreditation, and planned relocation of the AOSD LANT hardware suite to a new secure facility has engaged SSC San Diego C<sup>4</sup>I Programs Office Philadelphia's efforts for the past six months. Negotiations to relocate the AOSD PAC and NSAWC suites with their respective host activities continue.

Equally important was the planning and implementation of a hardware suite upgrade at CMSA PAC. Coordinating contracted services (local Hawaiian and mainland United States), ensuring the availability of installation materials, and scheduling concurrent hardware deliveries presented additional challenges created by the location of the site. The entire effort was completed on time, within budget, and without incident. Planning and preparations to perform the same upgrade at CMSA LANT in Virginia are now in progress with implementation scheduled for early FY01. A similar effort is anticipated for CMSA UK within the next year.

Support afforded COMFIFTHFLT during FY00 included preparing a Basic Electronic System Engineering Plan (BESEP) for relocation of the TMPS suite from its present location to new quarters, both situated in Manama, Bahrain. Commencement in FY03 is expected. A hardware upgrade and onsite system groom designed to improve overall system operations was also successfully accomplished. During and after the visit, all installation documentation was reviewed, redlined corrections made, and archived drawings updated.

With the exceptions of CMSA UK and COMFIFTHFLT, each site was visited at least twice during FY00 to ensure operational and physical integrity. Maintenance of site documentation and drawing packages is a continual evolution as is the training of on-site personnel regarding logistical matters, plant maintenance, and supply support.

#### **Point of Contact:**

Mr. Stephen Kubicki Jr. (TLAM MPS Shore Site Installation Team Leader) Code D4232 Tel (215) 214-8000/8037 or DSN 442-8000/8037,

Email: skubicki@spawar.navy.mil



John Kitano, Engineering Support



Jim Kitts, Logistics Support

# **LOGISTICS PLANNING SUPPORT TO PMA-281**

#### Role:

- → Technical Support
- **→** Maintenance Planning Support
- → Engineering Support
- → Documentation and Training
- **→** Life Cycle Support
- → Configuration Management

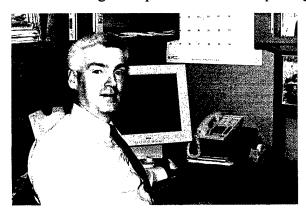


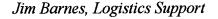
During FY00, SSC San Diego C<sup>4</sup>I Programs Office Philadelphia completely overhauled the Web server hardware. The Redundant

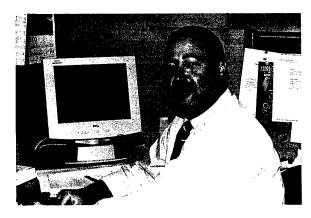
Array of Independent Disks (RAID) was upgraded to increase storage capacity. The power failure recovery plan was refined and tested by several simulated real-world power failures. In preparation for a catastrophe, a new tape back-up device was installed, and a new plan was developed to provide for more complete backups. New software was incorporated, including Seagate's Crystal Reports, and software training was provided.

SSC San Diego C<sup>4</sup>I Programs Office Philadelphia's Web Sites were granted the mandatory Department of Defense (DoD) Public Key Infrastructure (PKI) server certificates. The Logistics Planning Support team studied the fundamental theory and applicable methods of PKI server and client based digital signatures mandated to be used by all DoD email and web users within the next two years. We have worked with other telecommunication activities in the NAVAIR and SSC communities to ensure our customers experience the fewest possible interruptions in service. We have expanded technical support so now our Web Site users may call the PMA-281 Help Desk and initiate a technical support action.

Most recently, SSC San Diego C<sup>4</sup>I Programs Office Philadelphia has created a SIPRNET Web Site. This classified web site will be devoted to fleet support that augments the Help Desk and optimizes the troubleshooting and operational status reporting.







Dean Kralle, Logistics Support

SSC San Diego C<sup>4</sup>I Programs Office Philadelphia has worked to distribute the Logistics Support Library (LSL). All revised and new COTS manuals that support the PMA-281 systems were collected and sent to DAPS (Defense Automated Printing Services), where the documents are scanned, converted, and stored in a large data repository. The LSL is built from this repository. Each customer site received four copies of the seven CD pack, which was hand delivered; our fleet technicians provided installation training. Submission of the LSL for acceptance to the ISNS Preferred Product List (PPL) is planned for FY01. New documentation efforts include tasking to produce an updated Equipment Technical Manual (ETM) for the JSIPS-N and tasking to produce a new ETM for the PTW 4.0.

SSC San Diego C<sup>4</sup>I Programs Office Philadelphia Logistics Planning Support team developed web pages for parts, maintenance, and configuration change information for all vessels in order to provide real-time supply support information to the fleet. Supporting documentation is produced in a Portable Document Format (PDF) file and placed on the SSC San Diego C<sup>4</sup>I Programs Office Philadelphia's LifeLine Web Sites. Each ship can access documentation containing supply support and preventive maintenance documentation. As systems are upgraded, new and revised PDF documents are created and posted on the LifeLine Web Sites. This improvement using the Extranet and Intranet technologies provides the fleet with continuous access to supply support and configuration data without the need to create and ship hard copy around the world.

In an effort to improve configuration accounting, direct Internet access to the Configuration Data Manager databases was established via a user account and password and using the Oracle database downloaded to the personal computers of supply support logisticians. This database contains the configuration of each ship's systems. It is the master database, which is input to the Navy's master systems database known as the Weapon Systems File. Support personnel can view the contents of this database and perform quality control checks to identify any missing or incorrect configuration.

# **Point of Contact:**

Mr. James Barnes, Code D4232 Tel: (215) 214-8021, DSN: 442-8021

Email: barnesj@spawar.navy.mil



Dennis Alexander, Logistics Support



Joe Di Pardo, Logistics Support

# WASHINGTON PLANNING CENTER (WPC)

SSC San Diego C<sup>4</sup>I Programs Office Philadelphia provides various Logistic Support services to the Washington Planning Center (WPC). We provide a single Point of Contact to administer and provide status for numerous procurement requests. These tasks include researching and purchasing computer hardware, software, and peripherals; furnishing various transportation services for hardware and software releases; providing warehousing services for displaced systems; and maintaining the Configuration Management records for the WPC site.

SSC San Diego C<sup>4</sup>I Programs Office Philadelphia was tasked to provide on-site technical support to the WPC for the Tomahawk Planning System, Precision Targeting Workstation (PTW), and other various peripheries. The on-site technician provided a daily maintenance log and submitted system availability data, which is critical to maintenance philosophies. A contingency of this tasking was the opportunity to expand our role by offering and providing assistance in developmental programs. Our availability to assist in prototyping these experimental systems will expand our presence and evidence our expertise in evolving technologies.

SSC San Diego C<sup>4</sup>I Programs Office Philadelphia added and upgraded several systems in order to keep pace with technological advancements and fleet configurations. PTW 4.0 was added to the JSIPS-N architecture. The IPL was upgraded to a terabyte system to provide increased memory and storage

capabilities. For increased performance, the HP RAIDs on the National Input Segment Dissemination Element (NIS(DE)) were replaced with the CIPRICO 6900 RAIDs. On the TOMAHAWK Mission Planning Systems (TPS) US and UK systems, the Falcon RAIDs were upgraded with CIPRICO 6900 RAIDs, which more than doubled the storage capacity.

## **Point of Contact:**

**Mr. Allan M. Gaidis**, Code D4232 Tel: (215) 214-8033; DSN 442-8033

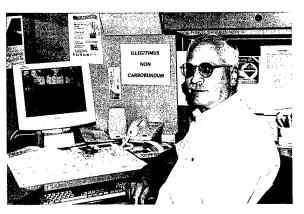
Email: gaidis@spawar.navy.mil



Frank Davies, Logistics Support



Ted Morrison, Installation Support

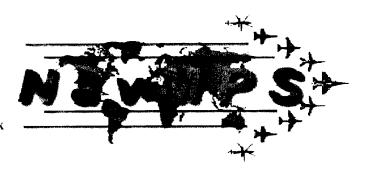


Bohdan Sobkiw, Logistics Support

# NAVAL MISSION PLANNING SYSTEMS (NavMPS)

#### Role:

- **→** Systems Engineering
- Fleet Introduction and Installation
- → Installation Planning
- → Technical Support Help Desk
- → Logistics Management
- → Procurement Support



Naval Mission Planning Systems (NavMPS) is a family of interactive graphic computer systems supporting aircrew mission and strike planning for United States Navy and Marine Corps airborne weapon systems. These systems consist of the Tactical Automated Mission Planning System (TAMPS), the Navy Portable Flight Planning Software (N-PFPS), and the Joint Mission Planning System (JMPS), which is currently in development. TAMPS was first deployed in 1987 at the direction of the Secretary of the Navy. In 1991, TAMPS was established as a program and became PMA-233. In 1999, the Program Office name was changed to Naval Mission Planning Systems to encompass the additional responsibility for other planning applications. With the exception of JMPS, these systems are currently installed onboard aircraft carriers, at shore bases, intelligence centers, weapons schools, and aviation support facilities throughout the world. In FY00, SSC San Diego C4I Programs Office Philadelphia continued to support NavMPS by providing systems engineering, installation, technical assistance, Onthe-Job Training (OJT), on-call fleet support, logistics management, and procurement support for all hardware and software versions of the NavMPS family of products.

Addressing the Navy's Y2K requirements, four Fleet Installation Teams (FIT), each consisting of one technician and one applications specialist, began FY00 with the responsibility for completing TAMPS version 6.2K hardware and/or software upgrades on four aircraft carrier CVIC server configurations.



Steve Fox, Head, Naval Mission Planning Systems Support Office



Karen Levine, Deputy, Naval Mission Planning Systems Support Office

The FIT also upgraded the workstations that were deployed with thirty-six squadrons in the associated airwings. The carrier installations required a complete hardware change due to the new mission planning local area network (LAN) configuration and functionality occurring simultaneously. The TAMPS 6.2 concept onboard CV/CVNs involves a LAN connecting the CVIC-based Sun E4000 TAMPS Server with as many as forty Ultra II Desktop TAMPS in the squadron ready-rooms. All teams submitted installation documentation in accordance with NAVSEA Technical Specification (NSTS) 9090.310b.

The installation of the hardware and software is the framework of the TAMPS program; the logistics support and systems engineering are the muscle. SSC San Diego C<sup>4</sup>I Programs Office Philadelphia has not only continued to develop the required standard operational documents, but also systems engineering and design documents. SSC San Diego C<sup>4</sup>I Programs Office Philadelphia developed and distributed Getting Started Charts and pocket checklist booklets for mission planners and System Administrator/ Data Base Administrator (SA/DBA) to provide operators with a convenient reference for equipment setup and operation.

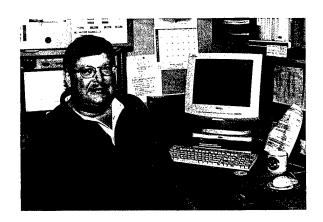
All maintenance and user documentation was updated and distributed for the NavMPS products in preparartion for TAMPS version 6.2.1. TAMPS user manuals and training materials for Mission Planning and SA/DBA were updated to support TAMPS version 6.2.1 and distributed to the schoolhouse. Instructor training for these courses is scheduled for the first and second quarters of FY01 during Operational Test (OT).

TAMPS 6.2K spares were procured, and TAMPS 6.2.1 spares requirements have been identified for procurement in FY01. On Board Repair Part (OBRP) Kits were distributed and re-stocked to support deployed systems. The Logistics Certification process has been implemented successfully for TAMPS 6.2K installations and to ensure complete delivery of all spares kits and documentation for each installation.

SSC San Diego C<sup>4</sup>I Programs Office Philadelphia's training group has coordinated our efforts with PMA-233 and various NavMPS training sites. The training group continues to closely coordinate with the Airwing Operations Officers. This coordinated effort has helped to familiarize users with our products and the benefits to aircrews. Our goal is to expose airwing personnel to NavMPS early in the pre-



Dave Salmon, Installations Support



Craig Doster, Logistics Support

deployment work-up cycle. As part of the longterm NavMPS training initiative, we have visited numerous Fleet Replacement Squadrons and Weapons Schools to assess current training efforts and to lay the groundwork for implementing the training policy outlined in the Navy Training Systems Plan. To facilitate implementation of the training policy, we have been active in customizing existing training materials to support community specific instruction. We are currently in the standup phase of conducting classes in advanced NavMPS operation at SSC San Diego C4I Programs Office Philadelphia's Strike Integration Test Facility. These classes will provide fleet operators with the opportunity to train at one of the few shore based locations with both the facilities and expertise to provide instruction in fully integrated employment of NavMPS, Intelligence, and Imagery systems.

Navy Portable Flight Planning Software (N-PFPS) Version 3.1.1 was distributed. Additional Flight Performance Modules (FPM) were distributed as they were certified. SSC San Diego C<sup>4</sup>I Programs Office Philadelphia completed the procurement, assembly, testing, and delivery of more than 800 N-PFPS systems. Maintenance plans, the User Logistic Support Summary (ULSS), the User's Manual, and other on-line documentation were updated. N-PFPS training is in development for commencement in early FY01.



J.C. Fitzgerald, Logistics Support



Chuck Storicks, Logistics Support



Paul Steinbacher, Logistics Support

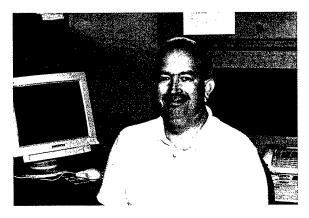


Timothy Boyce, Logistics Support

As the support agency for NavMPS products, SSC San Diego C<sup>4</sup>I Programs Office Philadelphia participated in the JMPS System Test and the Sustainment Tiger Teams. The System Test Team presented their recommendations to the JMPS leadership for a cost saving approach to testing software using a

component-testing approach. The System Test Team advanced the realization of the distributed test concept, as well as, developed a process to efficiently share test results in a joint test environment. The Sustainment Tiger Team provided its sustainment recommendations to the JMPS leadership and transitioned into the Operational Support Integrated Process Team (IPT) in which we participate. This IPT developed a Statement of Work for contracting JMPS logistics support to be implemented in FY01.

SSC San Diego C4I Programs Office Philadelphia Mission Planning Systems Help Desk continues to provide telephone support and visits to numerous sites worldwide, both ashore and afloat. The Help Desk provided technical and repair assistance, training, software and hardware installation, and crossdeck of systems between ships. The Help Desk participates in the In Process Review of all technical manuals. We also test new versions of software and the interfaces between NavMPS systems and other systems. We tested the TAMPS 6.2K to Global Command and Control System – Maritime (GCCS-M) version 3.1.2.1 interface. In addition, the Help Desk tested the TAMPS 6.2K to GCCS-M version 3.2 interface and helped to develop the patch to correct interface issues that were identified.



Michael Slough, Logistics Support



Mary Williams, Logistics Support



Bob Grant, Fleet Liaison

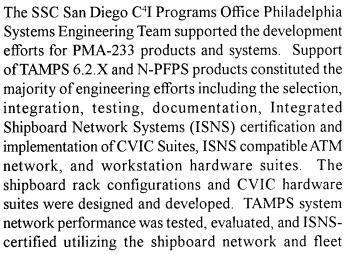


Beth Ann Miles, Logistics Support

Help Desk support continues for the TAMPS version 6.1.1f systems installed onboard the French Navy aircraft carrier, the *Charles de Gaulle*, and at the French maintenance facility as part of the Foreign Military Sales (FMS) program at PMA-233. On-site support was provided to resolve an issue with the

Multi-function Control Display Unit in the French E-2C. Support is scheduled to continue through FY03.

SSC San Diego C<sup>4</sup>I Programs Office Philadelphia's NavMPS shipriders have been successfully deployed aboard carriers, both during deployment and during work-ups. The support these technical representatives provide to all NavMPS systems has been well received by both the ships' crew and the airwing personnel. Shipriders have received repeated recognition from ships' commanding officers and airwing commanders, who have described Fleet support from our shipriders as indispensable. We have provided post-cruise debriefs to PMA-233 leadership IPT leads, OPNAV requirements officers, and sponsors from N62 and N88.





Fran Brown, Logistics Support



Judy Jolly, Logistics Support



John Sheplock, Logistics Support

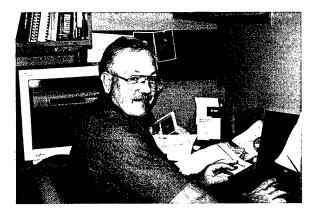


Paul Meisinger, Engineering Support

representative hardware systems in the SSC San Diego C<sup>4</sup>I Programs Office Philadelphia laboratory. N-PFPS computer selection and ISNS certification are distinct highlights for this year. As NavMPS transitions their System of Applications concept into product development and deployment, SSC San Diego C<sup>4</sup>I Programs Office Philadelphia engineering is positioned to provide the resources and the expertise necessary to succeed in this highly integrated, and network-centric Commercial Off-the-Shelf (COTS) environment.

# Specific engineering efforts included:

- Coordinated/implemented ISNS requirements and guidelines into the TAMPS Mission Planning LAN (MPLAN) Network Design.
- Designed, developed and documented the PC X-Windows configuration for TAMPS 6.2.1.
- Designed and developed the mapping server space required by TAMPS 6.2.1 utilizing a SUN COTS product. PC NetLink allows CVIC and ready-room users to save setting profiles, routes and maps on the RAID array of the TAMPS CVIC Server. This implementation will lay the ground work for JMPS Combat Version.
- Designed, developed, and installed MPLAN fiber plant for the *USS Harry S. Truman* (CVN 75) and the *USS George Washington* (CVN 73).
- Performed development testing on Dual ATM, "Out of the Box" SIPRNET and provided assistance to NAVAIR on Certification and Accreditation issues.
- Developed a workaround to a TAMPS 6.2.1 problem related to workstation shutdown procedures when the TAMPS primary server is unavailable. Developed a solution to STOP-A (L1-A) CPU halt function and developed procedures for setting up a NIS replica server on the 2300 and Network File Server mount background tasks.
- Developed the Advanced Tactical Air Command System (ATACS) LAN requirements document
- Completed StriPP/ISNS version 5 LAN requirements document.
- Provided support of the installation of the Real-time Execution Decision Support (REDS) system on the *USS Harry S. Truman* (CVN 75).
- Submitted REDS/IT-21 LAN requirements document for review by PMW-158-2.
- Designed and developed an Uninterruptible Power Supply (UPS) for TAMPS 6.2.1 for the CVIC server configuration.
- Integrated an Internal Boot Disk in the Enterprise 4000 for maintenance use, and provided detailed procedures on the installation of this hard drive.



Dennis Klinger, Engineering Support



Kevin O'Malley, Engineering Support

- Installed TAMPS 6.2K and 6.2.1 using the new configuration.
- Obtained ISNS approvals for TAMPS 6.2K and N-PFPS 3.1 and 3.1.1.
- Completed the TAMPS 6.2K drawing package and commenced the drawing package for TAMPS 6.2.1.
- Installed the schoolhouse network design enhancement at several weapons schools.
- Developed NavMPS 6.2.1 Installation Guides for the USS Nimitz (CVN 68) and the USS Ronald Reagan (CVN 76).
- Supported installation requirements of Smart Track for the TAMPS 6.2.1.

The SSC San Diego C<sup>4</sup>I Programs Office Philadelphia Systems Engineering Team participated in network certifications and testing. We developed test plans and test procedures for N-PFPS testing by PMA-158-2 and PMA-157. N-PFPS versions 3.1 and 3.1.1 testing is complete and both are now certified network systems. The team also performed ISNS network certification testing for TAMPS 6.2K, which has also been certified. We assisted the Navy Center for Tactical Systems Interoperability (NCTSI) test team in the testing of Meteorological/Oceanographic (METOC) data and TAMPS message formats.

The Systems Engineering Team also designed and developed the new Mini-Server and Server Lite configurations for TAMPS 6.2.1. We continued to develop Engineering Change Proposals (ECP), to conduct trade studies, and to make the hardware selections for TAMPS 6.2.1 system modifications.

## **Point of Contact:**

Mr. Steve Fox, Code D4233

Tel: (215) 214-8060/ DSN 442-8060;

FAX (215) 214-8110

Email: fox@spawar.navy.mil

SSC San Diego C4I Programs Office Philadelphia

and

Ms. Karen S. Levine, Code D4233

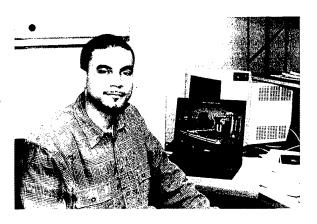
Tel: (215) 214-8061

Email: levine@spawar.navy.mil

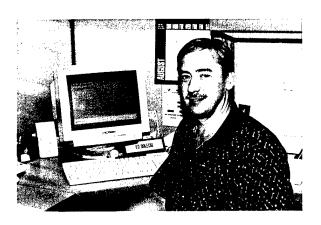
SSC San Diego C<sup>4</sup>I Programs Office Philadelphia



Nhan Nguyen, Engineering Support



Christopher LaBohne, Engineering Support



Edward Dolecki, Engineering Support

# DIGITAL CAMERA RECEIVING STATION

## Role:

- → System Design and
- > Integration
- → Hardware and Software Engineering
- **→** Procurement Support
- → Documentation
- → Training
- → Life Cycle Support
- → Configuration Management



The Digital Camera Receiving Station (DCRS) provides a digital imaging computer workstation under the Commercial-Off-The-Shelf Non-Development Item (COTS NDI) concept. This shipboard mounted workstation evolved from the Hand Held Digital Camera Reconnaissance System (HHDCRS), a portable system fielded in 1995. As the receive element for imagery from the F-14 Tactical Aircraft Reconnaissance Pod System (Digital Imagery) (TARPS(DI)), the DCRS provides near real-time digital imagery downlink capability of manned tactical reconnaissance from the F-14 aircraft. The DCRS also accepts digital photographic files and video inputs from all standard digital cameras and videotape formats. DCRS capabilities include digital photographic manipulation, high resolution video digitizing, National Image Transmission Format (NITF) conversion, Message Text Format (MTF) editor, a shipboard radio communications interface, and a local area network (LAN) interface for imagery dissemination within the aircraft carrier intelligence center (CVIC).

In late FY96, the Program Executive Office for Tactical Aircraft (PEO(T)) PMA-241 tasked SSC San Diego C<sup>4</sup>I Programs Office Philadelphia and the Naval Air Warfare Center - Aircraft Division, Indianapolis (NAWC-AD Indy) to design a near real-time digital imagery capability in the existing TARPS pods and associated F-14 aircraft. Working together, SSC San Diego C<sup>4</sup>I Programs Office Philadelphia developed a prototype shipboard receiving station while NAWC-AD Indy developed a prototype airborne image transmission capability.

In FY97, SSC San Diego C<sup>4</sup>I Programs Office Philadelphia designed and built the production version DCRS with full logistic and documentation support. Functional requirements resulting from the HHDCRS fleet evaluation were incorporated. The first DCRS was installed onboard the *USS Theodore Roosevelt* (CVN 71) to support VF-32 during deployment. The DCRS performed as designed, and numerous missions were flown successfully. Based on these missions, the Chief of Naval Operations (CNO) N88 identified this program as "urgent and compelling" and formalized it as a modification to operational requirement TW-30. DCRS installations were completed onboard six additional aircraft carriers and at two shore sites. A Portable DCRS (P-DCRS) was developed and fielded for the USMC Highly Mobile Multiple Wheeled Vehicles (HMMWV). In April 1997, CNO N88 hosted a TARPS(DI) and DCRS demonstration with reconnaissance flights over the Pentagon resulting in the formal announcement of Initial Operational Capability (IOC) for TARPS(DI) and DCRS.

During FY98, SSC San Diego C<sup>4</sup>I Programs Office Philadelphia performed five aircraft carrier DCRS installations, thus completing all active aircraft carriers. An interface was established with the Global Command and Control System – Maritime (GCCS-M) system to allow rapid movement of imagery to the JOTS14 workstation. The P-DCRS design was modified for deployable squadron use. Fast Tactical Imagery (FTI) was initiated allowing transmission of imagery from the Low Altitude Navigation and Targeting Infrared for Night System-Forward Looking Infrared Imager (LANTIRN-FLIR).

In FY99, SSC San Diego C<sup>4</sup>I Programs Office Philadelphia provided support to the Sea Control Wing, Atlantic for a new long-range capability, Organic Digital Imagery Now (ODIN), using S-3 aircraft. Several missions were supported with ODIN imagery successfully transmitting to the DCRS onboard *USS Dwight D. Eisenhower* (CVN 69) during exercises. In addition to the upgrading of six aircraft systems, four P-DCRS systems were built and fielded. A P-DCRS was modified for the *USS Coronado* (AGF 11) to support Fleet Battle Experiment - Echo.

In FY00, SSC San Diego C<sup>4</sup>I Programs Office Philadelphia performed one installation at the Strike Weapons and Tactics School, Atlantic (SWATSLANT), Oceana, Virginia, and upgraded five aircraft carrier and two shore site DCRS systems. We provided support to the Army during the Roving Sands/Purple Dragon Exercise for the receiving of FTI from tactical F-14 aircraft acting as Forward Air Controllers to an Army Tactical Exploitation System (TES) and Army Common Ground Station (CGS). Several missions were supported with FTI imagery transmitting to the TES, located at Fort Bragg, North Carolina, and the CGS located at Camp Lejeune, North Carolina. The TES and CGS successfully transmitted National imagery with Precision Guided Weapons (PGW) quality coordinates to the tactical F-14 aircraft for the prosecution of targets.

SSC San Diego C<sup>4</sup>I Programs Office Philadelphia supported PEO(T) PMA-241 at System Architecture Requirement and System Architecture Working Group meetings for TARPS(DI), FTI, and DCRS imagery requirements for the Naval Strike Warfare Planning System. Eleven telephone assistance requests, fifteen email assistance requests, two on-site technical support requests, three Combat Systems Readiness Assessments (CSRA), two Combat System Pre-Acceptance Tests (CSPAT), and two Casualty Reports (CASREP) were resolved. SSC San Diego C<sup>4</sup>I Programs Office Philadelphia provides a full range of services including custom design, development, system integration, installation, training, technical support, and life cycle management for the DCRS and airborne digital cameras and sensors.

## **Point of Contact:**

**Mr. Tim Urbanski**, Code 4234 (215) 214-8023/DSN 442-8023

Email: urbanski@spawar.navy.mil

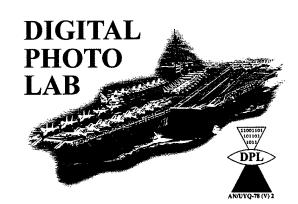


Tim Urbanski, Head, Imagery Support Office

# **DIGITAL PHOTO LAB AN/UYQ-78(V)**

#### Role:

- → System Design and Integration
- → Hardware and Software Engineering
- **→** Procurement Support
- **→ Documentation Preparation**
- → System Training
- → Life Cycle Support
- → Configuration Management



The Digital Photo Lab (DPL) AN/UYQ-78(V) program provides a computerized digital photography suite using the COTS NDI concept. The DPL allows a full range of digital photographic processes and the interchange of digital photographic files with other shipboard and combat camera systems. This program offers the benefits of modern state-of-the-art computer technology which improves the way the U.S. Navy produces imagery by enhancing Visual Information, Public Affairs Office, Surface Surveillance Contact, and other photographic functions. An additional benefit of this program is the reduction of shipboard photo chemical overboard discharge to assist in fleet compliance with Environmental Protection Agency regulations. Use of the DPL allows photo production to continue while in port, in non-discharge zones, or in remote locations that have limited fresh water. The DPL program is divided into distinct phases to allow a multi-level approach to the conversion of existing wet-chemical photo labs with the flexibility to provide different configurations of the DPL for various classes of U.S. Navy vessels.

In FY94, SSC San Diego C<sup>4</sup>I Programs Office Philadelphia personnel designed the shipboard-mounted DPL system with full observance of human engineering factors, mechanical shock and vibration, electrical safety, and equipment protection while optimizing functionality and versatility. Working with NAVSEA PMS-312, the production version DPL AN/UYQ-78(V)1 was authorized under SHIPALT 8424K (CV)

and 8425K (CVN). DPL AN/UYQ-78(V)1 systems were installed onboard all active CV/CVN class aircraft carriers, and logistic support was provided. A collateral program produced the design and fielding of the Hand Held Digital Camera Reconnaissance System (HHDCRS) for fleet evaluation within the F-14 A/B/D Tactical Aircraft.

An improved DPL Engineering Development Model (EDM) accommodated new technology and compliance for Y2K and ISNS requirements. As the DPL EDM system matured into the AN/UYQ-78(V)1B-1C-2A versions, NAVSEA PMS-377



Dennis Lloyd, Deputy Imagery Support Office

authorized the DPL AN/UYQ-78(V)1C installation under SHIPALT 253K (LHD). DPL AN/UYQ-78(V)1C systems were installed onboard the *USS Boxer* (LHD 4), *USS Bataan* (LHD 5), and *USS Bonhomme Richard* (LHD 6).

In FY99, SSC San Diego C<sup>4</sup>I Programs Office Philadelphia continued as the Cognizant Field Activity (CFA) and Life Cycle Manager (LCM) for DPL systems installed in the fleet. The DPL systems onboard the USS Kitty Hawk (CV 63), USS Constellation (CV 64), USS Enterprise (CVN 65), USS Theodore Roosevelt (CVN 71), USS Abraham Lincoln (CVN 72), USS George Washington (CVN 73), and USS John C. Stennis (CVN 74) were upgraded to the DPL AN/UYQ-78(V)1B/U. The DPL systems onboard the USS John F. Kennedy (CV 67), USS Dwight D. Eisenhower (CVN 69), and USS Harry S. Truman (CVN 75) were upgraded to the DPL AN/UYQ-78(V)2A/U. The DPL system onboard the USS Boxer (LHD 4) was upgraded to the DPL AN/UYQ-78(V)1C/U.

In FY00, SSC San Diego C<sup>4</sup>I Programs Office Philadelphia upgraded the *USS Bonhomme Richard* (LHD 6) to the DPL AN/UYQ-78(V)1C/U and the *USS Carl Vinson* (CVN 70) to the DPL AN/UYQ-78(V)1B/U. The Navy and Marine Corps Intelligence Training Center (NMITC), Dam Neck, Virginia, DPL Training systems were upgraded to the DPL AN/UYQ-78(V)2A/U and the DPL AN/UYQ-78(V)1B/U. A DPL AN/UYQ-78(V)1B/U was installed at Fleet Imaging Command Pacific (FLTIMGCOMPAC) for training purposes. An EDM of the Next Generation DPL, the DPL AN/UYQ-78(V)3, was developed to bring together the complete workflow process in the CV/CVN and LHD photo labs. This system encompasses four to six workstations, a dedicated high-speed photo LAN, and digital non-linear video editing capabilities. A prototype was installed onboard the *USS Dwight D. Eisenhower* (CVN 69) and a modified version installed onboard the *USS Harry S. Truman* (CVN 75).

SSC San Diego C<sup>4</sup>I Programs Office Philadelphia supported meetings with NAVSEA PMS-312 and PMS-377, PEO(T) PMA-241, and CNO N09C4. Twenty telephone assistance requests, twenty-five email assistance requests, eight on-site technical support requests, four Combat Systems Readiness Assessments (CSRA), one Combat System Pre-Acceptance Test (CSPAT), and two Casualty Reports (CASREP) were resolved. Operator and maintainer training curricula were modified for implementation through the Chief of Naval Education and Training (CNET) schools.

SSC San Diego C<sup>4</sup>I Programs Office Philadelphia provides a complete range of services including design, development, customizing hardware and software, system integration, installation, training, technical support, and life cycle management for the Digital Photo Lab system, digital hand-held cameras, and digital photographic production techniques.

## **Point of Contact:**

**Mr. Tim Urbanski**, Code D4234 (215) 214-8023/DSN 442-8023

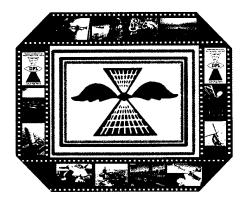
Email: urbanski@spawar.navy.mil

SSC San Diego C<sup>4</sup>I Programs Office Philadelphia



Anthony Brancato, Engineering Support





#### Role:

- → Engineering and Design Support
- → Acquisition Support
- **→** Integrated Logistics Support
- → Fleet Support

The Fleet Photo Support project provides support for conventional wet-chemistry photo labs onboard naval vessels. SSC San Diego C<sup>4</sup>I Programs Office Philadelphia supports new construction and existing sites with engineering, design, acquisition, integrated logistics, and on-site technical support. During FY00, new ship construction support was provided to NAVSEA PMS-312 and NAVSEA PMS-377. Engineering and design meetings were attended to identify replacement items for obsolete legacy equipment. Acquisition of Schedule "A" equipment, logistic item development, installation, test and certification, and training services were provided to update the photo labs onboard the *USS Kitty Hawk* (CV 63), *USS Constellation* (CV 64), *USS Enterprise* (CVN 65), *USS Theodore Roosevelt* (CVN 71), and *USS Abraham Lincoln* (CVN 72). The extensive overhaul of the four wet-chemistry photo processors onboard the *USS Constellation* (CV 64) resulted in a Bravo Zulu for the SSC San Diego C<sup>4</sup>I Programs Office Philadelphia team.

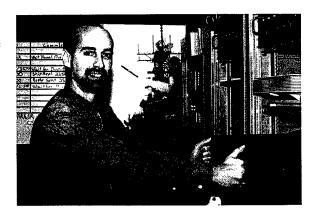
Integration of the conventional wet-chemistry photo processors with the Digital Photo Lab (DPL) LAN was accomplished onboard the *USS John F. Kennedy* (CV 67) and *USS Dwight D. Eisenhower* (CVN 69). Design and engineering support was provided for the reconfiguration of the CVIC photo lab onboard the *USS Nimitz* (CVN 68) and *USS Dwight D. Eisenhower* (CVN 69) to support the Naval Strike Warfare Planning Center. On-site technical support was provided for EH-38D processors and other Tactical Aircraft Reconnaissance Pod System (TARPS) film processing equipment onboard five

U.S. Navy aircraft carriers. One Combat Systems Readiness Assessment (CSRA) and one Combat System Pre-Acceptance Test (CSPAT) were performed, and no Casualty Reports (CASREP) were generated.

#### **Point of Contact:**

Mr. Tim Urbanski, Code D4234 (215) 214-8023/DSN 442-8023 FAX (215) 214-8110

Email: urbanski@spawar.navy.mil

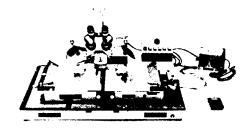


Charles Soule, Logistics Support

# ANALYTICAL PHOTOGRAMMETRIC POSITIONING SYSTEM (APPS)

## Role:

- → Depot Maintenance
- **→** Inter-Service Support
- > Configuration Management



The Analytical Photogrammetric Positioning System (APPS) is a stand-alone transportable light table and stereoscopic viewing system. The APPS utilizes prepared hard copy imagery and supporting Point Positioning Data Bases (PPDB) to provide precision mensuration data consisting of geographic position, datum conversions, distances, angular displacement, heights, and elevation from features shown on the imagery. The derived data are used for mission planning.

SSC San Diego C<sup>4</sup>I Programs Office Philadelphia is the APPS Depot Maintenance Inter-Service Agreement (DMISA) agent providing on-site and depot level service for approximately fifty-three units used by the USAF and the USN.

During FY00, the majority of the APPS service was provided to the USAF. On-site technical support was provided at thirteen USAF CONUS sites, fourteen USAF overseas sites, and one USN shore site.

The DMISA contract was reviewed, and the terms and conditions were revalidated. During this process, the USAF asked for testing, validation, and necessary corrective action for APPS functionality with the Y2K transition. The APPS DMISA contract will be continued until the transition to digital imagery and support data is complete.

## **Point of Contact:**

Mr. Eddie Smith, Code D4234

(619) 553-1942/DSN 553-1942

Email: esmith@spawar.navy.mil

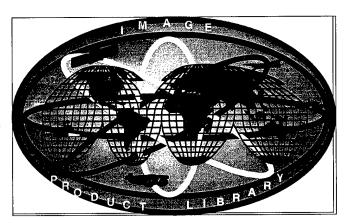


Eddie Smith, Engineering Support

# **IMAGE PRODUCT LIBRARY (IPL)**

## ROLE:

- → Installation
- → Customer Support
- → Hardware Engineering
- → System Acquisition
- System Assembly, Configuration, Integration, Installation
- → Logistics Support
- → Training
- → Configuration Management
- **→** Life Cycle Support



The Image Product Library (IPL) Program is a National Imagery and Mapping Agency (NIMA) sponsored effort to develop the standard United States Imagery and Geospatial Systems (USIGS) product archive system. This system was part of the NIMA's Pilot Accelerated Architecture Acquisition Initiative (A³I) for enhanced digital imagery request, distribution, and management for all echelons within the National and DoD Imagery/Intelligence community. The objective of the Pilot A³I was to quickly transition enhanced capabilities to the field forming the basis for the USIGS architecture. The DoD Intelligence Information System Management Board certified the newest baseline of the software, IPL version 2.1 to field on 23 November 1999. A new release, IPL version 2.5 is currently undergoing testing in preparation for fielding in early FY01.

The IPL provides the capability to supply image products to intelligence analyst users and non-intelligence users from assets at selected imagery intelligence (IMINT) production centers. IPL provides browser capability to query image product holdings at IMINT production centers and/or other IPLs to determine what image products are available to satisfy the user's needs. Users select an image product; indicate transfer parameters, which influence image product format and compression ratio; and request transfer of the product. The IPL browser workstation then receives the image product and notifies the user that the image product is available. The IPL also provides the capability to receive image products in



Vivian Di Cristofaro, Head, National Imagery & Mapping Agency Support Office



Frank Greco, Deputy and Installation Team Lead

National Imagery Transmission Format (NITF), Tape Format Requirement Documents (TFRD) format, or selected additional commercial formats and enter them in the Image Product Database. The IPL Manager has functions available for database maintenance and management.

Sources of imagery include National, Theater, Tactical, and Commercial assets that support producer and war fighter needs at all required levels. IPL provides worldwide, imagery dissemination within the USIGS Archive and Dissemination Element of the NIMA Libraries. IPL will become the Image Analyst's primary tool for supporting the storage and dissemination of imagery and imagery-based products worldwide. IPL provides the imagery community with improved accessibility, operational support, and distribution of geospatial and imagery products. To achieve this mission, IPL provides an automated capability to support the following activities:

- Query image product holdings from multiple sources,
- Receive imagery and/or image products from multiple sources,
- Maintain a database of imagery and/or image products,
- Transfer imagery and/or image products to imagery clients from imagery sources,
- Transfer imagery to remote locations using several formats and compression ratios.

IPL provides the server software necessary to implement the IPL mission, supports client searches/requests for applicable imagery and image products, and provides information on the status of request/transfers. IPL interfaces with other imagery sources (IESS, 5D, etc.) to enable the client to conduct queries of imagery holdings and requests, and receive the imagery.

SSC San Diego C<sup>4</sup>I Programs Office Philadelphia's involvement in the IPL program began in 1997 with our initial funding from the NIMA program office. During FY00, SSC San Diego C<sup>4</sup>I Programs Office Philadelphia received continued tasking to execute the efforts necessary to initiate and maintain IPL in the field.



Peter Di Pasquale Logistics Support Team Lead



Robert Mullen, Engineering Team Lead



Joel Cohen, Engineering Support

SSC San Diego C<sup>4</sup>I Programs Office Philadelphia provided Site Introduction Teams to install the IPL software and hardware at sites located in both CONUS and abroad. These teams performed site surveys, delivered and installed IPL software on site equipment, configured site systems to support specialized end user requirements, and migrated site imagery databases to the IPL environment. Site Introduction Teams also provided hardware installation support at numerous operational sites where they installed IPL hardware procured through SSC San Diego C<sup>4</sup>I Programs Office Philadelphia and integrated it into the existing site network architecture. Site Introduction Teams also provided on-the-job training for IPL operators, delivered supporting documentation required by the site for IPL use/support, reported observed IPL and/or site problems and discrepancies, and reproduced deliverable software from master electronic media. In addition, the teams provided technical support to sites and the help desk, supported site security certification, and provided shipboard installation planning and coordination. During FY00, the Site Introduction Teams performed 35 IPL on-site system software installations and 51 hardware installations. The teams also performed site acceptance testing, training, and technical support.

Our Hardware Engineering Team provided hardware engineering support to the IPL program in FY00. This endeavor included hardware definition, requirements definition, installation guidance package planning, site checks, and system installation parameter definition. With the support of our resource management personnel, this team provided procurement support to NIMA for the acquisition of hardware and COTS software and licenses for the IPL program. This effort incorporated the tasks necessary to cost, purchase, track, and warehouse the Non Development Item (NDI) system components identified by the IPL program. The team performed hardware assembly, configuration, and integration; system and program software installation; software/hardware integration; IPL system testing prior to field introduction; and equipment receipt, inventory, storage, shipment packaging, and shipping.

During FY00, SSC San Diego C<sup>4</sup>I Programs Office Philadelphia procured 71 complete IPL systems in either a medium configuration (Sun 4500) or a small configuration (Sun E450). We placed a total of 321 procurement actions in support of IPL programs. During the year, we also assembled, configured, integrated, shipped, and installed 51 systems. Fourteen of the installations were performed on Navy vessels and 37 at land-based sites supporting Common Imagery Ground Station Surface (CIGSS) and Joint Task Force (JTF) tasking.

SSC San Diego C<sup>4</sup>I Programs Office Philadelphia provided Logistics Support for IPL including documentation generation and assessment (logistics planning, training, certification, testing, user



Lou Di Girolamo, Engineering Support



Norbert Reis, Engineering Support

documents), and sparing assessment for hardware acquisitions. The Logistics Team also supported system configuration management and tracking by providing hardware and software status accounting of user sites, and inventorying and tracking IPL hardware acquisitions in the CM database.

SSC San Diego C<sup>4</sup>I Programs Office Philadelphia provided interim support for IPL elements that are not covered by extended warranty or service agreement and set up and maintained our interim depot, failure tracking and analysis, and hardware technical support for this effort. To support all deployed IPL systems worldwide, we had previously established a program-wide IPL spares depot at FedEx, Memphis, Tennessee.

SSC San Diego C<sup>4</sup>I Programs Office Philadelphia continued to support our established IPL spares depot at FedEx, which was developed in conjunction with the JSIPS-N program depot to provide integrated JSIPS-N/IPL Navy Logistics support. We developed the Navy's spares and documentation requirements for shipboard systems, and we purchased and delivered the pack-up kits to the ships in support of the PMA-281 ILS certification program. During FY00, 16 shipboard pack-up kits and documentation sets were delivered in support of the Navy's ILS Certification Program.

During FY00, SSC San Diego C<sup>4</sup>I Programs Office Philadelphia provided IPL technical support and Customer Support Services for the IPL systems. Our Customer Support Team maintained a toll free

international access number for customer support; logged and tracked all requests for support; submitted formal trouble reports, as required; provided 24-hour 7-day per week support to troubleshoot and resolve technical problems; monitored results and ensured that problems were accurately tracked to resolution; and analyzed the nature of problems and reported trends.

## **Point of Contact:**

Ms. Vivian DiCristofaro, Code D4235

(215) 214-8050; DSN 442-8050

Email: dicriviv@spawar.navy.mil



Robert Flipse, Installation Support



Mike Finlay, Installation Support



Robert Overholt, Installation Support

# **GLOSSARY OF ACRONYMS**

A<sup>3</sup>I Accelerated Architecture Acquisition Initiative

AGF Command Ship

AIS Automated Information Systems
AOSD APS Operations Support Detachment

AOSD LANT Afloat Operational Support Detachment, Atlantic
AOSD PAC Afloat Operational Support Detachment, Pacific
APPS Analytical Photogrammetric Positioning System

APS Afloat Planning System

APS/RDS Afloat Planning System/Rapid Deployment Suite

ATACS Advanced Tactical Air Command System

ATM Asynchronous Transfer Mode

BESEP Basic Electronic System Engineering Plan

BF Battle Force
BG Battle Group

BPA Basic Purchasing Agreement

C<sup>4</sup>I Command, Control, Communications, Computers,

and Intelligence

CASREP Casualty Report

CBT Computer Based Training

CD-ROM Compact Disk Read Only Memory

CFA Cognizant Field Activity

CG Cruiser

CGS Common Ground Station

CHBDL Common High Bandwidth Data Link
CIGSS Common Imagery Ground Station Surface
CINCLANTFLT Commander In Chief, Atlantic Fleet
CINCPACFLT Commander In Chief, Pacific Fleet
CM Configuration Management
CMSA Cruise Missile Support Activity

CMSALANT Cruise Missile Support Activity, Atlantic CMSAPAC Cruise Missile Support Activity, Pacific

CMSAUK Cruise Missile Support Activity, United Kingdom

CNET Chief of Naval Education and Training

CNO Chief of Naval Operations
COMFIFTHFLT Commander, U.S. Fifth Fleet

COMNAVAIRLANT Commander, Naval Air Force, Atlantic Fleet

CONUS Continental United States

COR Contracting Officer's Representative

COTS Commercial Off-the-Shelf

COTS NDI Commercial Off-the-Shelf Non Development Item

CPU Computer Processing Unit

CSPAT Combat System Pre-Acceptance Test
CSRA Combat Systems Readiness Assessment

CV Aircraft Carrier

CVIC Aircraft Carrier Intelligence Center

CVN Aircraft Carrier Nuclear

DAPS Defense Automated Printing services

DBA Data Base Administrator

DCRS Digital Camera Receiving Station
DIA Defense Intelligence Agency
DISC Defense Industrial Support Center
DIWS Digital Imagery Work Station
DLA Defense Logistics Agency

DMISA Depot Maintenance Inter-Service Agreement

DoD Department of Defense DPL Digital Photo Lab

ECP Engineering Change Proposal
ECU Environmental Control Unit
EDM Engineering Development Model
ESC Electronic Systems Command

ESIS Enhanced Sensitive Compartmented Information (SCI) Isolation

Segment

ETEPP Electronic Tomahawk Employment Planning Package

ETM Equipment Technical Manual

FBE Fleet Battlelab Experiment

FedEx Federal Express

FISC Fleet and Industrial Supply Center

FIT Fleet Installation Team

FLTIMAGCOMPAC Fleet Imaging Command Pacific

FMS Foreign Military Sales
FPM Flight Performance Module
FTI Fast Tactical Imagery

FY Fiscal Year

GCCS-M Global Command and Control System – Maritime

GENSER General Service

HHDCRS Hand Held Digital Camera Receiving System HMMWV Highly Mobile Multiple Wheeled Vehicle

ICD Installation Control Drawings

IDIO Indefinite Delivery / Indefinite Quantity

IDS Intrusion Detection System

IESS Imagery Exploitation Support System

ILS Integrated Logistics Support

IMINT Imagery Intelligence

IMPAC International Merchant Purchase Authorization Card

IOCInitial Operational CapabilityIPAImage Product ArchiveIPLImage Product LibraryIPRIn-Progress ReviewIPTIntegrated Process TeamISEAIn-Service Engineering Agency

ISNS Integrated Shipboard Network Systems
IT-21 Information Technology for the 21st Century

JCA JSIPS-N Concentrator Architecture
JMPS Joint Mission Planning System
JOTS Joint Operational Tactical System

JSIPS-N Joint Service Imagery Processing System – Navy

JTF Joint Task Force

JWICS Joint Worldwide Intelligence Communications Systems

LAN Local Area Network

LANTIRN-FLIR Low Altitude Navigation and Targeting Infrared for Night System-Forward

**Looking Infrared Imager** 

LCC Amphibious Command Ship

LCM Life Cycle Manager
LHA/LHD Amphibious Assault Ships

LPMP Launch Platform Mission Planning

LSL Logistics Support Library
LST Logistics Support Terminal

MDS Mission Distribution System METOC Meteorological/Oceanographic

MILSPEC Military Specification

MILSTRIP Military Standard Requisition and Issue Procedures

MOAMemorandum of AgreementMPLANMission Planning LANMPSMission Planning SystemMTFMessage Text Format

NAVAIR Naval Air Systems Command
NAVICP Naval Inventory Control Point
NavMPS Naval Mission Planning System
NAVSEA Naval Sea Systems Command

NAWC-AD Naval Air Warfare Center – Aircraft Division NCTSI Navy Center for Tactical Systems Interoperability

NDI Non-Development Item

NELO Naval Electronic Logistics Office
NIMA National Imagery and Mapping Agency

NIS National Input Segment

NIS (DE) National Input Segment, Dissemination Element

NITF National Imagery Transmission Format

NMITC Navy and Marine Corps Intelligence Training Center

N-PFPS Navy Portable Flight Planning Software NRNASC Naval Reserve Air System Command NSAWC Naval Strike and Air Warfare Center

NSA Naval Support Activity
NSAP NSA Philadelphia

NSTS NAVSEA Technical Specification
NSWC Naval Surface Warfare Center
NSWPC Naval Strike Warfare Planning Center

OBRP On Board Repair Part
ODIN Organic Digital Imagery Now

OJT On-the-Job Training

OLPST On-Line Performance Support Tools

ONI Office of Naval Intelligence

OT Operational Test

P-DCRS Portable Digital Camera Receiving Station

PDF Portable Document Format

PEO(T) Program Executive Officer for Tactical Aircraft

Program Executive Officer Strike Weapons and Unmanned Aviation Project PEO(W)

Portable Flight Planning Software **PFPS** Precision Guided Weapons **PGW** Prototype Integration Facility PIF Public Key Infrastructure **PKI** Program Manager for Aircraft **PMA** Program Management Review **PMR** 

PO Program Office

Point Positioning Data Base **PPDB** Preferred Products List PPL

**Precision Targeting Workstation PTW** 

Redundant Array of Independent Disks RAID

Rapid Deployment Suite RDS

Real-time Execution Decision Support REDS

System Administrator SA Special Access Program SAP System Acceptance Testing **SAT** 

Sensitive Compartmented Information Facility **SCIF** 

Secure Data Transfer SDX Ship Alteration **SHIPALT** 

**Ships Installation Drawing** SID

Secure Internet Protocol Router Network **SIPRNET** 

SITF Strike Interface Test Facility Space and Naval Warfare **SPAWAR** SPAWAR Systems Center SSC

Strike Warfare and Tactics School, Atlantic **SWATSLANT** 

**TAMPS** Tactical Automated Mission Planning System Tactical Air Reconnaissance Pod System **TARPS** 

Tactical Air Reconnaissance Pod System (Digital Imagery) TARPS (DI)

Tactical Exploitation System TES

**Tape Format Requirement Documents TFRD** 

Tactical Input Segment TIS

Tomahawk Land Attack Missile **TLAM** Theater Mission Planning Center **TMPC Tactical Mission Planning System TMPS Total Obligating Authority** 

TOA

**TPS** TOMAHAWK Mission Planning System

TLAM Planning System Afloat TPS-A **Total Quality Management TQM** 

Tomahawk Strike Coordination Module **TSCM** Transit Case Tactical Input Segment TTIS

**User Logistic Support Summary ULSS UPS** Uninterruptible Power Supply United States Air Force **USAF** 

United States Imagery and Geospatial System **USIGS** 

United States Marine Corps **USMC** 

**United States Navy** USN

Washington Planning Center WPC

Year 2000 Y2K

#### REPORT DOCUMENTATION PAGE

Form Approved OMB No. 0704-01-0188

The public reporting burden for this collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing the burden to Department of Defense, Washington Headquarters Services Directorate for Information Operations and Reports (0704-0188), 1215 Jefferson Davis Highway, Suite 1204, Arlington VA 22202-4302. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to any penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number.

P	LEASE	DO	NOT	RETU	JRN	YOUR	FORM	TO	THE	ABO	VE	ADDRE	SS.
---	-------	----	-----	------	-----	------	------	----	-----	-----	----	-------	-----

1. REPORT DATE (DD-MM-YYYY)	2. REPORT TYPE	3. DATES COVERED (From - To)				
01–2001	Technical	October 1999 to September 2000				
4. TITLE AND SUBTITLE		5a. CONTRACT NUMBER				
ACCOMPLISHMENT REPORT						
SSC San Diego C <sup>4</sup> I Programs Off	ice Philadelphia	5b. GRANT NUMBER				
6. AUTHORS						
	5c. PROGRAM ELEMENT NUMBER					
7. PERFORMING ORGANIZATION NA		5d. PROJECT NUMBER				
Space and Naval Warfare Systems		5e. TASK NUMBER				
700 Robbins Avenue, Building 24	C <sup>4</sup> I Programs Office Philadelphia					
Philadelphia, PA 19111-5098	1	5f. WORK UNIT NUMBER				
1 made pma, 111 12111 2020						
9. SPONSORING/MONITORING AGEN	ICY NAME(S) AND ADDRESS(ES)	8. PERFORMING ORGANIZATION				
Commander, Naval Air	National Imagery	REPORT NUMBER				
Systems Command	& Mapping Agency	TD 3118				
1421 Jefferson Davis Hwy	1465 Lee Road					
Arlington, VA 22243–5120	Chantilly, VA 22051					
	_	10. SPONSOR/MONITOR'S ACRONYM(S)				
Commander, Naval Sea Systems	Command					
2531 Jefferson Davis Hwy		11. SPONSOR/MONITOR'S REPORT				
Arlington, VA 22243–5160		NUMBER(S)				

#### 12. DISTRIBUTION/AVAILABILITY STATEMENT

Approved for public release; distribution is unlimited.

#### 13. SUPPLEMENTARY NOTES

#### 14. ABSTRACT

SSC San Diego C<sup>4</sup>I Programs Office Philadelphia is responsible for a program of development, in-service engineering, procurement, installation support, configuration control, and integrated logistics support for shipboard and shore-based Command, Control, Communications, Computer's and Intelligence (C<sup>4</sup>I) Systems, mission planning systems, and electronic photographic processing systems. SSC San Diego C<sup>4</sup>I Programs Office Philadelphia provides technical support to the Naval Air Systems Command, Naval Electronic Logistics Office, Naval Sea Systems Command (PMS-312/PMS-377), and the National Imagery & Mapping Agency. Headed by a Civilian Manager, SSC San Diego C<sup>4</sup>I Programs Office Philadelphia is comprised of 62 civilians including Engineers, Computer Specialists, Intelligence Operations Specialists, Technicians, Logisticians, and Management Support personnel, practicing Total Quality Management and ensuring the Quality Process is routinely used. Engineering and Technical Support is provided by 225 contractor personnel. This report cites awards and recognition received by SSC San Diego C<sup>4</sup>I Programs Office Philadelphia during Fiscal Year 2000.

## 15. SUBJECT TERMS

Mission Area: Command, Control, Communications, Computers, and Intelligence (C<sup>4</sup>I)

management support technical accomplishments

16. SECURITY (	CLASSIFICATIO	N OF:		18. NUMBER	19a. NAME OF RESPONSIBLE PERSON		
a. REPORT	b. ABSTRACT	c. THIS PAGE	ABSTRACT	OF PAGES	F. R. Wahler		
				FAGES	19B. TELEPHONE NUMBER (Include area code)		
U	U	U	UU	62	(215) 214–8100		